DOCUMENT RESUME

ED 239 028 CE 036 724

AUTHOR Skruber, Richard
TITLE Designing Learning Environments for the Enhancement of Self-Directed Learning: A Personal Approach to Integrating Theory and Practice.
PUB DATE Nov 82
NOTE 19p.; Paper presented at the National Adult Education Conference (San Antonio, TX, November 1982).
PUB TYPE Viewpoints (120) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Adult Education; *Adult Learning; Adult Students; Behavioral Objectives; Cognitive Style; *Educational Environment; Evaluation Methods; Higher Education; *Independent Study; Learning Activities; Learning Experience; Learning Motivation; *Learning Processes; Self Evaluation (Individuals); *Student Evaluation; *Teacher Role; Teaching Methods

ABSTRACT

Self-directed learning is more appropriate than teacher-directed learning for adult students in colleges and universities. In a self-directed learning environment, students collaborate with the teacher in determining the skills to be learned in the course and form teams needed to carry out work to learn the skills. One learner-oriented model is based on the concept of shared responsibility and can be adapted to a variety of coursework. This model is based on the transfer of authority from teacher to student for sanctioning or authorizing students to certify each other in acquiring skills. This process, called "self-certification," is based on the perspectives of Moore and Anderson and features the following: (1) student participation in the determination of competencies appropriate to the particular course content; (2) students setting evaluation standards and criteria for the authoritative assessment of performance; (3) students becoming certified to perform as experts according to their own specified criteria; and (4) students certifying other students in performing the skill. Following these principles should lead to an environment that is more conducive to adult learning. However, if the teaching is to become learner-centered, the teacher must reevaluate his/her role and change it to meet these conditions. The teacher must become a facilitator instead of an authority figure so that people can learn in a self-directed environment that is compatible with mature adults. (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED239028

DESIGNING LEARNING ENVIRONMENTS FOR THE ENHANCEMENT OF SELF-DIRECTED LEARNING: A PERSONAL APPROACH TO INTEGRATING THEORY AND PRACTICE

Richard Skruber

Florida State University/Florida International University
Cooperative Doctoral Program

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

R Skruber

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CE036724

I. EVALUATION AND SELF-DIRECTED LEARNING

One concept that is consistent with the idea of adult education is that of the self-directed learner. Self-directed learning is closely related to the concept of andragogy which is defined by Malcolm Knowles as the art and science of helping maturing students learn (1975). Specifically, as Knowles explains,

> self-directed learning is a process in which individuals take the initiative with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies and evaluating learning outcomes (p. 18).

As defined, this type of learning focuses on processes and/or methods of inquiry rather than on specific content, i.e., how to diagnose one's learning needs, how to formulate goals, how to evaluate outcomes, etc. Given this, it would seem that the institutional or formalized educational activities especially those designed for adults, ought to emphasize developing competencies in performing these processes. That is, education ought to have as one of its primary goals helping individuals become self-directed learners.

While self-directedness may be more operative in non-credit, informal, learning activities, few programs in higher education, even those in adult education and related areas, emphasize the learning of facilitative processes, or focus on helping the learner to learn how to learn. One area

moreover, which is lacking even in those programs which feature some measure of self-directed learning is that of self-directed approaches to the evaluation of learning outcomes. More specifically I am referring to program settings and formats which allow and provide for student-directed approaches to the evaluation of self and peers' performance in educational activities.

Evaluation of student performance in most traditional higher education settings has usually meant teacher-directed evaluation. The teacher, according to the traditional pedagogical model, sets the goals, standards, evaluation criteria and authoritatively applies them to student performance. In practice, this form of evaluation "objectifies" the grade: learners, unable to participate in the determination of course standards and evaluation criteria, must restrict their involvement to conforming behavior in order to "earn" a grade. In many cases learner questioning of the assigned tasks and/or the criteria for evaluation is tantamount to questioning the expert authority of the teacher who may respond by challenging the learner or altogether discounting the objections. The hidden messages and assumptions of this kind of teacher-directed behavior are:

(1) Learners are essentially dependent upon the teacher for deciding how and what should be learned.

(2) Learners' experiences are of less value than that of the teacher.

(3) Learners are primarily content oriented and learning experiences should be organized according to content units.

(4) Learners are motivated by external rewards and punishments such as grades, degrees, diplomas, fear of failure, etc.[1]

In effect, these assumptions are telling learners that they are neither qualified nor "authorized" to question the rule and policy making authority of the teacher. They either play according to the teacher's rules or they take a chance on not playing at all.

There is little doubt that behavior based on these pedagogical assumptions on the part of teachers seriously detracts from the learning process. As adult educators John Verduin, Harry Miller and Charles Greer have pointed out:

> The motivation to learn something is present if the individual can see the personal meaning involved. If the goals for instruction are not those of the learner or not accepted as valid by the learner, the content will have little or no meaning for him. Unless he can see the personal meaning involved, it is doubtful if real learning... will occur in the adult student (1977, p. 12).

Equally important as the motivational aspect attached to increased involvement of the learner in the design of his own educational activity, is the humanistic perspective of self and peer evaluation of performance and learning outcomes. In many respects evaluation is the key process or cornerstone in the planned learning process. If the learner is unaware or is unable to articulate the nature and extent of his learning according to some pre-determined plan, curriculum, or standard, then can it be said that learning has occurred? To answer this question and still retain the integrity, individuality, independence and initiative of the self-directed

---

[1] Summarized from Malcolm Knowles, Self-Directed Learning. Chicago: Follet, 1975.

learner there must be some model for an adult education or andragogical orientation to evaluation. For as Knowles explains;

> ..(T)he crowning instance of incongruity between traditional educational practice and the adult's self-concept of self-directivity is the act of a teacher giving a grade to a student. Nothing makes an adult feel more childlike than being judged by another adult; it is the ultimate sign of disrespect and dependency, as the one who is being judged experiences it (1970, p. 43).

Related to the idea of self-evaluation and indeed to the larger overarching concept of self-directedness in learning is the democratic ideal. This is characterized not only by the notion that individuals should be given the opportunity for growth and self development but given the necessary competencies and support, individuals will make the right decisions to guide their own development. Applied to formal education the democratic ideal is characterized by genuine participation of the learners in designing their own learning activities. This of course requires that learners possess a measure of authority in the decision making process. Eduard Lindeman, in championing the democratic philosophy in adult education has commented that:

> One of the chief distinctions between conventional and adult education is to be found in the learning process itself.... In an adult class the student's experience counts for as much as the teacher's knowledge. Indeed, in some of the best adult classes it is sometimes difficult to discover who is learning most, the teacher or the students. This two-way learning is also reflected in the management of adult education enterprises. Shared learning is duplicated by shared authority. In conventional education the pupils adapt themselves to the curriculum offered, but in adult education the pupils aid in formulating the curricula... Under democratic conditions authority is of the group (In Gessner, 1956, p. 166).

II. THE BASIS FOR DESIGNING LEARNING ENVIRONMENTS

Perhaps then, considering the relationships among self-directed learning and evaluation, democracy in education and authority, it may be that the traditionally based teacher-directed evaluation model normally found in most institutions of higher education is far too rigid about ensuring the integrity of faculty authority. This rigidity may actually inhibit self-directed learning and be counter-productive to the aims of institutions of higher education as well as to the aims of a democratic society. What may be called for, however, is not the abandonment of the professional leadership role of faculty members, but a more flexible approach to their use of authority in the educational setting. This approach would be based on the concept of shared authority between students and faculty providing ample opportunities for students to participate in the design, implementation and evaluation of their learning experiences. The importance of the use of authority in the learning relationship has been emphasized by Jerome Bruner (1978) when he wrote:

> There is always a special problem of authority in the instructional situation ... (T)he regulation of this authority relationship affects the nature of the learning that occurs. The relations between one who instructs and one who is instructed is never indifferent in its effect upon learning (p. 42).

The task of the democratic-minded teacher then is the design of educational environments which permit or enhance self-directedness in learners through a sharing of authority.

To assist in this endeavor Moore and Anderson have postulated a set of

four principles for designing such learning environments. "These principles," as Moore and Anderson explain them, are "aimed to make the student clear about what he is doing, and more generally, what is going on, are systematically related ... (to) that process whereby ... infantile behavior is gradually transformed into adult conduct." (1969) Moore and Anderson further explain that any environment which satisfies these four principles will be a "clarifying environment." The significance of what I propose is that the application of one or more of the principles of Moore and Anderson will assist all those concerned with the teaching of adults in designing learning environments compatible with the theory and practice of self-directed learning. Specifically, I am proposing a learning environment based on the perspectives principle[1] of Moore and Anderson which is designed to allow the transfer of authority from teacher to learner to occur in order that self-directed evaluation of performance may become a reality.

III. The Situation - Need For A New Action Theory

In my experiences as both an adult learner and teacher of adults I have realized some significant incongruities in my espoused theory and theory-in-use concerning the idea of andragogy and self-directed learning.[2] As an adult learner I espoused and indeed criticized others who engaged in primarily pedagogical approaches to learning. I was

---

[1]The perspectives principle will be discussed in detail in section IV of the paper.

[2]Espoused theory and theory-in-use are concepts explained by Argyris and Schon in Theory in Practice: Increasing Professional Effectiveness as (1) espoused theory is the theory of action an individual subscribes to and communicates to others when asked how he would behave in a given situation; (2) theory-in-use is the theory that actually governs his behavior and can be determined or constructed from observing his actual behavior in the situation.

particularly critical of those adult educators who themselves espoused theories compatible with self-directed learning but whose theories-in-use were substantially teacher-directed practices. When in the course of being a teacher of adults I rationalized my own failure to incorporate self-directed learning concepts with a variety of excuses. Some of these were: students didn't want to be self-directed but would rather be dependent on me as the teacher; the institution did not sanction or encourage non-traditional learning practices such as self-directed learning; course content did not lend itself to such non-traditional practices; and the most deceptive of all, I was practicing good adult education practices when in fact I was only at best practicing benevolent pedagogy.

I became aware of the inconsistency during the teaching of a course entitled "Administrative Leadership and Behavior". I had not only designed the course as to what the students would learn, how they would learn it and how they would be evaluated, I had pedagogically invoked my authority when some students questioned the operation of the class by challenging them to conform, design something better, or drop the class. Some time later in the course during a discussion on motivation I explained that in many cases individuals are motivated to achieve goals to the extent to which they are involved in planning and setting these goals. At that time, one of the students whom I had challenged earlier in the course said, "You mean like in this course?" It was then that I realized the extent to which the incongruity existed and that the degree to which I exercised authority inhibited self-directed learning and failed to provide a democratic educational climate. As

a result I have since attempted to design learning environments which facilitate self-directed learning and utilize learner-directed approaches to evaluation.

IV. DESIGN FOR A LEARNING ENVIRONMENT

One such learner-oriented model is based on the concept of shared responsibility and can be adapted to a variety of coursework. This model is based on the transfer of authority from teacher to student for the sanctioning or "authorizing" of students to certify each other in acquiring skills. This process, which I have termed self-certification, is based on the perspectives principle of Moore and Anderson and features:

(1) Student participation in the determination of competencies appropriate to the particular course context;

(2) Students setting evaluation standards and criteria for the authoritative assessment of performance;

(3) Students becoming certified to perform as "experts" according to their own specified criteria;

(4) Students certifying other students in performing the skill.

The principle states that "one environment is more conducive to learning than another if it both permits and facilitates the taking of more perspectives towards whatever is to be learned." (1969) These perspectives are explained and summarized according to self-certification as follows:

agent perspective = The idea that each of us is capable of being the cause of action or an activity and experiencing the sense of initiation. In self-certification this perspective relates to students determining the competencies

to be learned and setting evaluation criteria for the assessment of performance.

patient perspective = The idea that each of us at times is subject to consequences over which we have little or no control. Being the recipient of effects not of our making. In self-certification this relates to being certified in other skills according to criteria and standards decided by others.

reciprocator perspective = The idea that we are capable of seeing ourselves as others see us. It is the ability to perceive our behavior as objective bystanders and thus gain an understanding of our behavior from that perspective of the "generalized other."
In self-certification this relates to the idea that as certifiers as well as having to be certified, students are able to perceive themselves from the perspective of other students as well as how the teacher perceives them.

referee perspective = The idea that we are capable of assessing, judging and evaluating others in interaction. It is the ability to examine the interactions of others and generalize normative ways of behaving.
In self-certification this relates to designing activities relevant to the course context which generally demonstrate competency in a particular skill. It includes the evaluation of performance of the skill according to measurable criteria which can be said to apply in most cases.

By way of further explanation the self-certification process operates fundamentally along the following lines. The learning experience is organized around a set of skills to be learned in conjunction with the course content. While this suggests that this process is applicable primarily to experiential or competency-based course formats, conceptual or higher order learning domains may be integrated with skills for more innovative learning activities with some imaginative course design on the part of teachers. The skills to be acquired may be determined by the teacher or may be decided on jointly by the teacher and students. The latter of course is more desirable when self-directedness in learning is a key objective.

Once the skills to be acquired have been determined, the students organize themselves into teams which are responsible for conducting one or more certification sessions. The teams are responsible, with the teacher in the role of facilitator, for researching literature pertinent to the skill, operationalizing the skill into specific criteria of performance, designing a certification activity, and conducting a certification class session. When this work is complete, the teacher uses the process that each certification team has designed to certify the students who compose that team so that they then become themselves "certified" in the skill. After being certified the teams are then authorized to certify others in the skill.

Using this process, students are involved in setting the goals, standards, evaluation criteria and authoritative assessment of their own performance. They also experience the apprehension generated by the process of judging others and as a result become more aware of the nature of the student-teacher relationship. Additionally, students develop a comprehensive understanding of the skill they certify which facilitates the learning of the other skills as they seek certification according to the processes developed by the other team.

A vitally important aspect of the whole process mentioned above is the new role requirements for the teacher. In my own case prior to designing and implementing the process, I had been operating under, but never articulating, primarily teacher-directed learning assumptions as I went about fulfilling my perception of the role of teacher. These assumptions manifested themselves in such behaviors as: designing a course around content which I deemed necessary for students to know,

in other words, diagnosing the learning needs of others; using teaching techniques which were most convenient or comfortable for me and; discounting students' experience as valuable resources for learning. This usually took the form of ignoring what students said until they no longer saw any purpose in relating their experiences, discouraging further discussions on students' experiences by using my authority to change topics or interrupt students, or by devaluing the experiences as not as potent as the content I am transmitting. In addition, I would determine how students' performance would be evaluated and use the tasks which I had devised as necessary for the students to "earn" grades as ways of controlling such classroom behavior as attendance, participation, reading, completing course tasks, etc. I discovered that changing to an environment that would facilitate self-directed learning, however, required a drastic change in my classroom behavior. I had to re-examine my perceptions and assumptions of my role as teacher. I found this to be a difficult process. While I was aware that some of my behaviors changed, I discovered that overcoming the behaviors of teacher-directed practices was a longer, slower process that I had imagined since it required a new theory rather than just a major revision of the action theories underlying my behaviors.

V. BUILDING A NEW THEORY

I came to the realization that a change in my role necessitated a change in my self-concept from that of teacher to that of facilitator. This required an emphasis on the learner rather than on myself. Instead of trying to impress students with my content knowledge or making them aware of how dependent they were upon me for their learning, I tried to focus on the students' knowledge and use that as a resource to help them in directing their own learning. I had to assess my own resources as to what could be

useful to learners as well as how to make those resources available to them in ways that they might find helpful. I had to admit to both myself and the learners that I am not an expert who has mastered all there is in a given body of knowledge. I made it explicit that not only was I not an expert, but that I intended to be a learner in the class by listening, participating, investigating and sharing in the learning experiences. I had to learn how not to hide behind my authority by revealing myself as an authentic human being with the same feelings, hopes, anxieties, strengths and weaknesses as the learners. All these behaviors seemed to me to be the result of reassessing and subsequently changing the underlying variables of a teacher-directed theory of learning to that of a facilitative theory of learning and resulted in these variables for a new theory:

(1) Not disguising or avoid stating facts, ideas, conclusions and feelings that increase my exposure to others so that the information I provide will have a high degree of congruence with reality;

(2) Not being suspicious of learners' views, opinions, and reasons for behaviors;

(3) Not minimizing my dependence on others;

(4) Not imposing controls on learners' behavior in order to attain learning goals;

(5) Not expecting learners to accept my views while rejecting any attempts by learners to impose their influence.

As my role evolved from that of teacher to that of facilitator, I became increasingly aware of the extent of my previous teacher-directed behaviors, the effect it had on students as learners and human beings and how the students helped me to learn my new role even better.

The new espoused theory which evolved out of these experiences and self-inquiry is: If students are provided the opportunity and encouragement they can become self-directed learners. This can be accomplished

in part through the design of learning environments which emphasize the role of teacher as facilitator through the sharing of authority, in supportive, democratic climates.

While this might appear as similar to my old espoused theory of advocating self-directed learning for all educational activities, a closer examination will reveal significant differences. First, the old theory was espoused from the perspective of a learner criticizing those who did not, in my estimation, follow andragogically based practices but was not based on collecting valid information. Second, the governing variables of this perspective were the same as those when I as a teacher myself followed teacher-based (pedagogical) learning practices. These governing variables being those listed by Argyris and Schon in their analysis of Model I behavior; i.e., define goals and try to achieve them, maximize winning and minimize losing (own and control the task), minimize generating or expressing negative feelings, and be rational. The new espoused theory is grounded in the Model II governing variables which are: valid information, free and informed choice, internal commitment to choice and bilateral protection of others. (1974)

The new theory while it is a theory of professional practice and action, must still exhibit the characteristics necessary for a good theory. The characteristics or properties of a good theory, as Argyris and Schon (1974) point out for example are: generality, relevance, consistency, completeness, testability, etc. According to these criteria the new theory is evaluated as follows: The new theory is better in that it can be applied to almost all learning environments. In almost all cases learning environments can be designed which by changing the role of teacher to facilitator through the sharing of authority will augment, enhance or allow self-directedness in learning. The theory

is consistent and relevant in that there are no internal contradictions concerning the relationships between and among the principal variables (self-directed learning, authority, facilitator's role, the governing variables of facilitater which produce behavior consistent with self-directed learning, student self-assessment techniques, democratic approaches to education) and the duration and depth of learning may be inferred. The completeness of the theory rests upon the proposition that the sharing of authority between teacher and students is a necessary prerequisite for self-directed learning. From this proposition a set of assumptions was constructed (e.g. self-directed learning is better because ... students should define their own learning needs, etc.) to develop a theory that if not complete in its present form attempted to approach a theory that at least was complete in its main assertion.

VI. A PERSONAL APPRAISAL OF A NEW PERSONAL THEORY

The purpose of the implemented course of action was: To assist individuals in becoming self-directed learners by designing a learning environment that allows individuals to participate in diagnosing their learning needs, formulating learning goals and evaluating learning outcomes.

The new course of action appears to be effective in helping students become self-directed learners at least to the extent that they participate in (1) designing the course around their learning needs, (2) formulating learning goals and (3) evaluating learning outcomes. In addition to the observations that the students do indeed perform the above processes, the overall impression to be gained from these innovations is that the energy level of students is higher than in the previous teacher-directed formats. Students show more enthusiasm by being more involved in per-

forming the tasks without controlling or coercive behavior on my part, overall attendance has improved and students take the initiative in meeting in other than class times and students on the whole interact with each other more than previously. In addition students appear to be more motivated in that they voluntarily come earlier and/or stay later to meet with their teams, and show an increased measure of independence in researching and gathering information about their projects. A greater amount of students come to class prepared to participate in the planning and designing of their certification processes. Overall students appear to have fun and be interested in learning. My experiences with this learning design seem to bear out what Knowles has written about self-directed learning. According to Knowles,

> "there is convincing evidence that people who take the initiative in learning learn more things, and learn better, than do people who sit at the feet of teachers passively waiting to be taught. They enter into learning more purposefully and with greater motivation. They also tend to retain and make use of what they learn better and longer than do the (passive) learners." (p. 14)

While I have not been able to fully corroborate the latter statement at this time, I suspect that students apply their learning more and are more aware of observable changes in their various daily performances. I say this on the basis of (1) students reporting to me that they have used their newly acquired behaviors and knowledge in other than class situations, and (2) by my observations of students using new behaviors in other than demonstration/performance situations.

As a result of my new course of action, my espoused theory is that if students are to develop as self-directed learners then my role will have to change from that of teacher to that of facilitator. This involves

a change in behaviors (as mentioned on p. 12) based on a new set of underlying variables for a theory that explains the relationship of shared authority with learning environments which enhance self-directed learning.

Jack Mezirow explains that "central to the adult educator's function is a goal and method of self-directed learning. Enhancing the learner's ability for self-direction in learning as a foundation for a distinctive philosophy of adult education has breadth and power. It represents the mode of learning characteristic of adulthood." (1981) This, I believe, is the crowning objective of self-directed learning, to have people learn in a fashion that is compatible with the concept of the maturing adult.

A Selected Bibliography

Argyris, Chris, and Schon, Donald A. Theory in Practice: Increasing Professional Effectiveness. San Francisco: Jossey-Bass, Inc. Publishers, 1974.

Bruner, Jerome T. Toward a Theory of Instruction. Cambridge, Ma.: Belknap Press, 1966.

Gessner, Robert (Ed.) The Democratic Man: Selected Writings of Eduard C. Lindeman. Boston: Beacon Press, 1956.

Knowles, Malcolm T. The Modern Practice of Adult Education. New York: Association Press, 1970.

_____. Self-Directed Learning. New York: Association Press, 1975.

Mezirow, Jack. "A Critical Theory of Adult Learning and Education." Adult Education, A Journal of Research and Theory. 1981, 32 (1), 3-24.

Moore, Omar, Khayyam and D. A. Anderson. "Some Principles for the Design of Clarifying Educational Environments." In D. Goslin (Ed.), Handbook of Socialization Theory and Research. Chicago: Rand McNally and Company, 1969.

Verduin, J. R., Miller, H., and Greer, C. Adults Teaching Adults. Austin, Tx.: Learning Concepts, 1977.